

What is claimed is:

1. A method for coding transform coefficients in picture and/or video coders and decoders

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wherein

for blocks of (video) pictures containing significant transform coefficients, the coding of transform coefficients takes place in such a way that, for each block,

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- in a scan process, the positions of significant transform coefficients in the block and subsequently,

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- in a reverse scan order - starting with the last significant transform coefficients within the block - the values (levels) of the significant transform coefficients

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are determined and coded.

2. The method according to claim 1,

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wherein

each significant transform coefficient of the block other than the last transform coefficient of the block is characterized by a one-bit symbol.

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3. The method according to claim 1,

wherein

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for each significant transform coefficient, the sign is indicated by a one-bit symbol (SIGN) and the magnitude is indicated by a binary-coded symbol (ABS).

4. The method according to claim 1,

wherein

5 the magnitude is indicated by a symbol (ABS) in unary
binarization or by a symbol (ABS) having a prefix part
and a suffix part, wherein the prefix part consists of
ones and the suffix part is coded in a 0th order exp-
golomb code.

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5. The method according to claim 1,

wherein

15 blocks containing significant transform coefficients
are characterized by a one-bit symbol CBP4 in
connection with further syntax elements, such as, for
example, CBP or macro block mode.

20 6. The method according to claim 1,

wherein

25 by transferring a one-bit symbol (SIG) for each
coefficient of a block and a one-bit symbol (LAST) for
each significant coefficient of a block, a
significance mapping is coded, wherein the transfer
takes place in a scan order, (SIG) serves for
identifying significant coefficients and (LAST)
30 indicates whether there are further significant
transform coefficients in the block.

7. The method according to claim 6,

35 wherein

modeling

- for the one-bit symbol CBP4,
- for coding the significance mapping and/or
- for coding the coefficient magnitudes

5 takes place in a context-dependent way.

8. The method according to claim 6,

wherein

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no significance information (SIG, LAST) is transferred
for the last scan position of a block.

9. The method according to claim 1,

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wherein

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block types of transform coefficients having
comparable statistics are summarized to block
categories.

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10. An arrangement having at least one processor and/or
chip formed such that a method for coding transform
coefficients in picture and/or video coders and
decoders can be performed, wherein

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for blocks of (video) pictures containing significant
transform coefficients, the coding of transform
coefficients takes place in such a way that, for each
block,

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- in a scan process, the positions of significant
transform coefficients in the block and subsequently,

- in a reverse scan order - starting with the last
significant transform coefficients within the block -
the values (levels) of the significant transform
coefficients

are determined and coded.

- 5 11. A computer program enabling a computer, after having
been loaded into the memory of the computer, to
perform a method for coding transform coefficients in
picture and/or video coders and decoders, wherein
- 10 for blocks of (video) pictures containing significant
transform coefficients, the coding of transform
coefficients takes place in such a way that, for each
block,
- 15 - in a scan process, the positions of significant
transform coefficients in the block and subsequently,
- 20 - in a reverse scan order - starting with the last
significant transform coefficients within the block -
the values (levels) of the significant transform
coefficients
- are determined and coded.
- 25 12. A computer-readable storage medium on which a program
is stored, enabling a computer, after having been
loaded into the memory of the computer, to perform a
method for coding transform coefficients in picture
and/or video coders and decoders, wherein
- 30 for blocks of (video) pictures containing significant
transform coefficients, the coding of transform
coefficients takes place in such a way that, for each
block,
- 35 - in a scan process, the positions of significant
transform coefficients in the block and subsequently,

- in a reverse scan order - starting with the last significant transform coefficients within the block - the values (levels) of the significant transform coefficients

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are determined and coded.

- 10 13. A method wherein a computer program according to claim 11 is downloaded from an electronic data network, such as, for example, the Internet, to data processing means connected to the data network.